

ABSTRACT

A cache management method disclosed herein enables optimal cache space settings to be provided on a storage device in a computer system where database management systems (DBMSs) run. Through the disclosed method, cache space partitions to be used per data set are set, based on information about processes to be executed by the DBMSs, which is given as design information. For example, based on estimated rerun time of processes required after DBMS abnormal termination, cache space is adjusted to serve the needs of logs to be output from the DBMS. In another example, initial cache space allocations for table and index data is optimized, based on process types and approximate access characteristics of data. In yet another example, from a combination of results of pre-analysis of processes and cache operating statistics information, a change in process execution time by cache space tuning is estimated and a cache effect is enhanced.